朝比奈泰彦*: 地衣類雑記 (§ 213–214)

Yasuhiko ASAHINA*: Lichenologische Notizen (§ 213–214)

(Plates I–IV)

§ 213. Either *Usnea japonica* Vain. or *Usnea straminea* Müll. Arg.

In 1918, on the basis of the specimens sent by Yasuda, Vainio published a new species *Usnea japonica* Vain.[1] In his original description of the latter he cited as its type locality "Prov. Rikuzen, **Shobuta** (67)". On the contrary Motyka[2] recorded "locus classicus: Japonia, **Gamo**, Prov. Rikuzen, ad *Pinus Thunbergii*".

To decide this discrepancy I have examined Yasuda's original specimens preserved in the herbarium of the University of Tokyo and found two packages with the same numerical order 67. One of them is dated as "July 20, 1913. Gamo..." and the other as "May 10, 1914, Shobuta...". Both localities lie near by along the Pacific coast of Prov. Rikuzen, and are of the same physical condition and I could find no difference between the specimens from both localities. Presumably both of them were sent to Vainio, from which he selected Shobuta specimen as the type of his new species, while Motyka during his *Usnea*-study received from Turku herbarium those specimens collected in Gamo. Though Vainio and also Motyka[3] considered *U. japonica* to be proper to Japan, I am of opinion that it is one of the prominent species of oceanic element and of southern origin.

Until the beginning of Taisho-era (1912–) luxuriant growths of *Usnea japonica* were observed in the pine forest (*Pinus Thunbergii*) along the Pacific coast of Honsyu between N 38° and N 35° lat. In response to the rapid development of technical industries in Japan, the natural scenes suffered radical changes and it is feared that a total annihilation of lichen flora in these territories will come soon. It is also a very remarkable fact that *U. japonica*

* National Science Museum, Ueno Park, Tokyo, Japan. (TNS). 国立科学博物館.

1) Bot. Mag. Tokyo, **32**: 154, 1918.
2) Motyka, Monograph. Pars systematica, p. 459, 1947.
3) Motyka, Monograph. Pars generalis, p. 402, 1947.

does not occur in the inland of Japan. The northern limit of the occurrence of *U. japonica* on the Pacific coast of Honsyu is Mt. Kinkwasan (ca N 38° lat.), which is situated at the Ojika-peninsula, the eastern side offshore is the point, where the cold Oya-shiwo (Kamchatka current) blocks the warmer Kuroshiwo (Japan current) and prevents its approach to the main land.

Formerly I have segregated those individuals possessing thinner branches among *U. japonica* and called them var. *boninensis* Asahina. Almost all specimens of *U. japonica* from Bonin islands (Ogasawara islands) belong to this variety, though they are met with also on the Pacific coast of Japan. Besides I have a few specimens collected in Sulphur island (Iwo-jima) and Saipan of Mariana islands, which closely resemble or are identical with *U. japonica* var. *boninensis* Asahina. In Formosa the specimens of *Usnea japonica* were collected at first at the middle slope of Mt. Alishan (Nimandaira). On the other hand among the Formosan collection of Kurokawa I could sort out several specimens of the same species collected at Kural, a coastal village of Hêngchung (恒春) peninsula, manifesting themselves to be a member of the oceanic element. These facts induced me to compare *U. japonica* with specimens of southern territories.

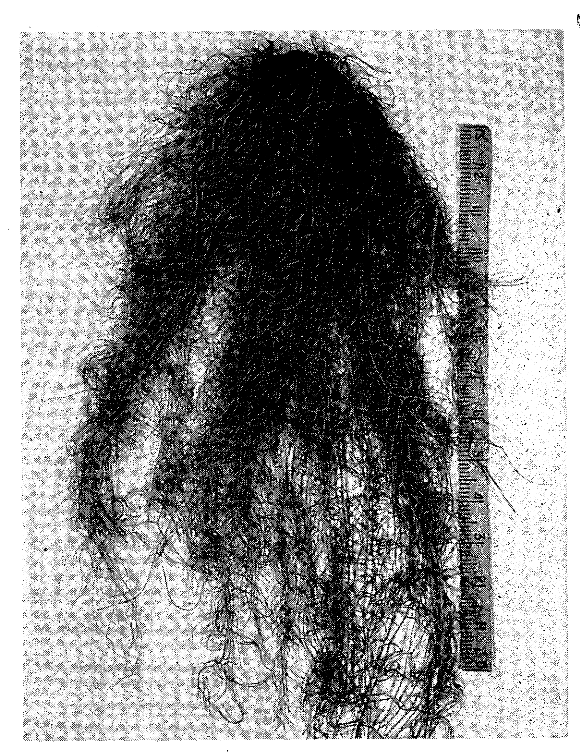


Fig. 1. *Usnea japonica* Vain. var. *boninensis* Asahina Coll. in Is. Chichijima, Bonin Isl.

At first I have started to examine *U. straminea* Müll. Arg., as it is the

type species of Sect. Stramineae-Subsect. Eustramineae Mot., to which *U. japonica* belongs and its distribution area stretches from Islets of Indian ocean to Oceanea and Pacific districts of southern Asia. The type specimen of *U. straminea* Müll. Arg.[4] was collected in Mauritius island and consists of 3 sheets, one of which must be excluded as an alien. The main branches of the correct type specimen are about 2.5 mm thick and quite identical with full grown individuals of *U. japonica* (Gamo specimen). In contrast to light brownish Müller's specimens Japanese plants are darker brown, which may be attributed to the result of different condition of preservation. Probably *U. straminea* var. *substraminea* Mot. will correspond to the ordinary *U. japonica* and may include partly *U. japonica* var. *boninensis* Asahina.

I am of opinion that *U. japonica* Vain. growing on the Pacific coast of Japan is the descendant of some lichen such as *U. straminea* Müll. Arg., the germs of which were conveyed by the equatorial current and acclimatized in the temperate region of Japan. Motyka mentions as a difference between *U. straminea* and *U. japonica* the funnel-form base of lateral branchlets in the former and the simply constricted and articulated base of the latter. As I experienced with the specimens in question the above difference is rather ambiguous and misleading. However, I wish, at present, to refrain from discarding the name *U. japonica* and to wait until we have clarified the natural relation between *U. japonica* var. *boninensis* and *U. straminea* var. *substraminea* Mot. and also between *U. societatis*, *U. intercalaris* and *U. neocaledonica*, which Motyka himself casts some doubt upon their autonomy.

§ 214. **Usnea nidularis** Asahina, nov. sp.

U. japonica Vain. var. *nidularis* Asah. in sched.

Thallus pendulus, usque ad 50 cm (vel ultra) longus, sat rigidus, statu vivo stramineo-viridis, in herbario fuscescens, basi tenui, indistincta, prope basin parce dichotome ramosus, iterum fere non ramosus. Rami arcuati, basi usque ad 2 mm crassi, vulgo tenuiores, per totam longitudinem fere uniformes, dein apice abrupte attenuati, articulatim irregulariter rupti, subteres, foveolatuli et deformatuli, epapillati, verruculis in soraliis fatiscentibus asperati vel saltem pseudociphellis maculati. Ramuli laterales 1–2 cm longi, irregulariter

4) I am deeply indebted to Dr. J. Miège, Director of Conservatoire et Jardin Botaniques, l'Institut de Botanique systematique de l'Université de Genève, who took trouble to send me these specimens on loan.

nidulatim vel subnidulatim aggregati.

Reactiones: med. K+rubescens, P+lutescens. Acidum usnicum, acidum norsticticum et acidum salacinicum continens.

Typus (preserved in TNS): Matsukawa-ura, Prov. Iwaki. leg. Kurokawa. 18. VII. 1958. A specimen collected in Bali island (Indonesia) by Ogata (Oct. 2, 1931) and another one collected in Tjibodas in Java by Kurokawa, no. 2206, 1964.

var. **subnuda** Asahina, nov. var.

Rami principales valde elongati, usque ad 50 cm (vel ultra) longi, ramuli laterales rarissimi et non nidulatim aggregati. Ceterum ut in typo.

Kurokawa no. 58718. Matsukawa-ura, Prov. Iwaki, 1958 (Typus in TNS). M. Ogata no. ——. Java statione non indicata. 17. IX. 1931. V. Schiffner, Iter indicum 1893/94. no. 3443, sub *Usnea Vriesiana* Mont. et v. d. B.[5]

In 1958 Kurokawa collected lichens along the Pacific coast of Prov. Iwaki and brought a good deal of specimens tentatively determined as *U. japonica*. By closer examination I have found many individuals, which though closely resembles but sharply distinguishable from *U. japonica* by the rough touch of surface and peculiar arrangement of branchlets, which recalls us to the similarities with *Usnea nidifica* Tayl. But by the comparison with type specimen of *Usnea nidifica* Tayl.[6] I could decide that they are not conspecific.

Explanation of plates

Pl. I. A. Type specimen of *Usnea straminea* Müll. Arg.
B. A full grown individual of *Usnea japonica* Vain. Gamo specimen.

Pl. II. C. *Usnea japonica* Vain. Collected in Formosa.
D. *Usnea japonica* Vain. Shobuta specimen.

Pl. III. E. *Usnea straminea* Müll. Arg. Collected in Australia.
F. *Usnea straminea* Müll. Arg. Collected in Java.

Pl. IV. G. *Usnea nidularis* Asahina. Collected in Matsukawa-ura, Prov. Iwaki, Japan.
H. *Usnea nidularis* var. *subnuda* Asahina.

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5) Asahina, J. J. Bot., **33**: 261 (1958). Formerly this type was considered to be identical with *U. japonica* Vain.

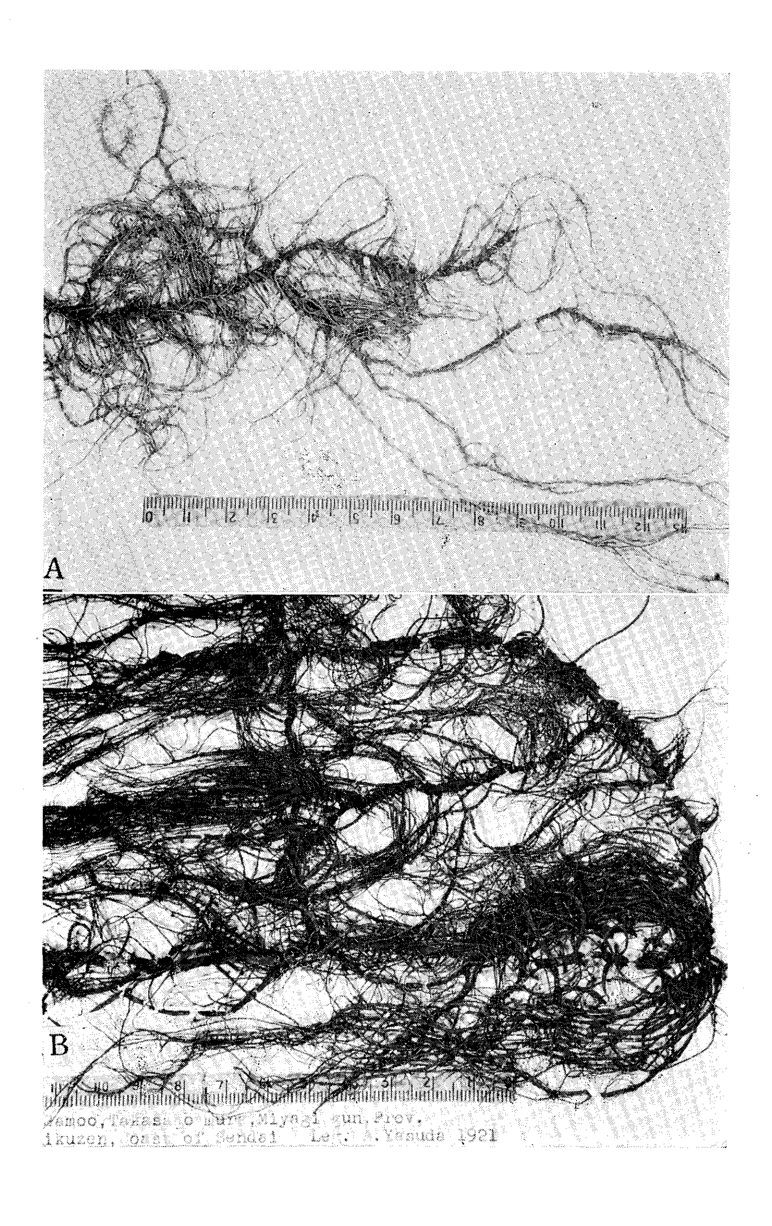
6) I am very much indebted to Dr. I.M. Lamb for his kindness to let me examine the type specimens of *Usnea nidifica* Tayl. on loan.

Usnea japonica の最初の命名者 Vainio は勿論其後立派なモノグラフを作った。Motyka[3] でも本種を日本固有品と考えた。然し本種の産出が本土の太平洋沿岸北緯35°から38°の間に殆ど集中し内陸では一二の疑わしき標本以外見当らない事を考えると最も典型的の oceanic element に属すると云える。猶又その一変種 var. *boninensis* Asahina は小笠原島から南方へかけて硫黄島，サイパン島などに出てくるので印度洋からオセアニア一帯に分布する *Usnea straminea* Müll. Arg. と比較するのを必要とすると感じた。そこでジュネーブ大学腊葉館長 Miège 氏の好意でそのタイプ標本を検査する事を得た。このタイプ標本は Mauritius 島産のもので日本の陸前菖蒲田産のよく成長したものと全く酷似し唯タイプ標本の方は稍々淡い褐色で日本産の方は濃厚な褐色である。これは恐く貯蔵の状況により生じた変化であろう。含有成分も両者共にウスニン酸，ノルスチクチン酸，サラチン酸である。Vainio の挙げた菖蒲田産のタイプ品の枝条は *straminea* のタイプより細いが Motyka も var. *substraminea* と云う変種を設けて枝の細いものをこれに一括した。丁度筆者が var. *boninensis* を設定したのと同じ処置である。一方では近年黒川道博士が濠洲やインドネシアで採集した標本で *U. japonica* と区別がつかぬものが多々あるがこれ等は産地の上から *U. straminea* と呼ぶことになる。按ふに *U. straminea* の芽胎が赤道海流から黒潮に入って日本々土に近づき附近陸上の好条件をなす松林に浸入したと考えてもあまり無理ではあるまい。殊に *U. japonica* の北限は金華山（牡鹿半島）である。こゝは黒潮が南下する寒流に押えられて本土に接近できなくなる地点である。筆者は南洋諸島から記載されて居る *U. intercalaris, U. societatis, U. neocaledonica* なぞ Motyka 自身も *U. straminea* と果して異るかどうかと疑って居る標本をよく調べた上で *U. japonica* と *U. straminea*の異同を決定したいと思って居る。

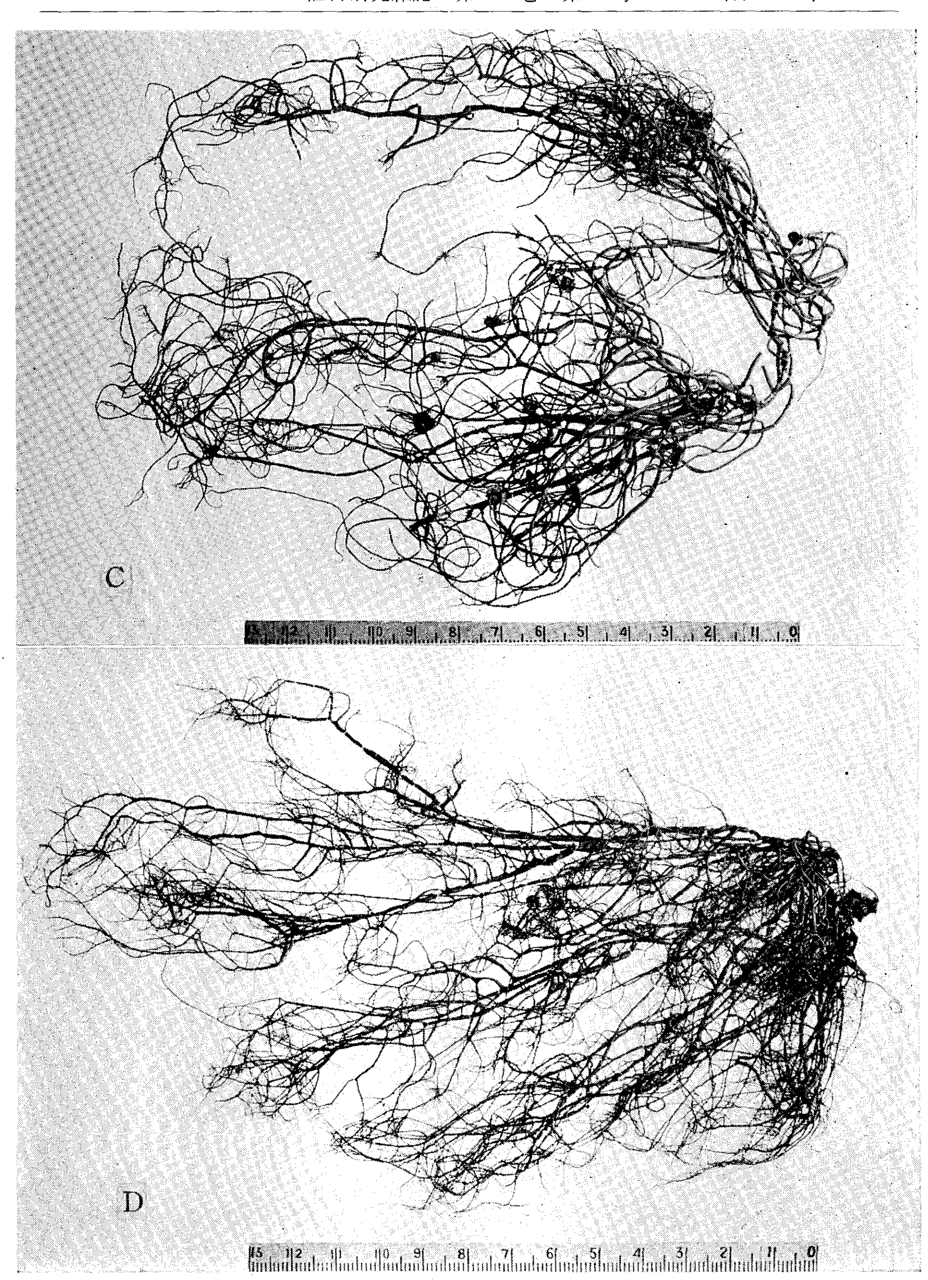
又一方では 1958 年に黒川博士が磐城海岸で多量の *U. japonica* 標本を採集して来たがその内に *japonica* とは区別されるべき可なり多数の標本があった。これは側枝の発生が稀で而も先端か又は特定の場所に集中して鳥巣状を呈する癖がある。

○紅毛丹と亜答枳（久内清孝）Kiyotaka HISAUCHI: Two plant names written in the Chinese characters by Chinese residents in Thailand

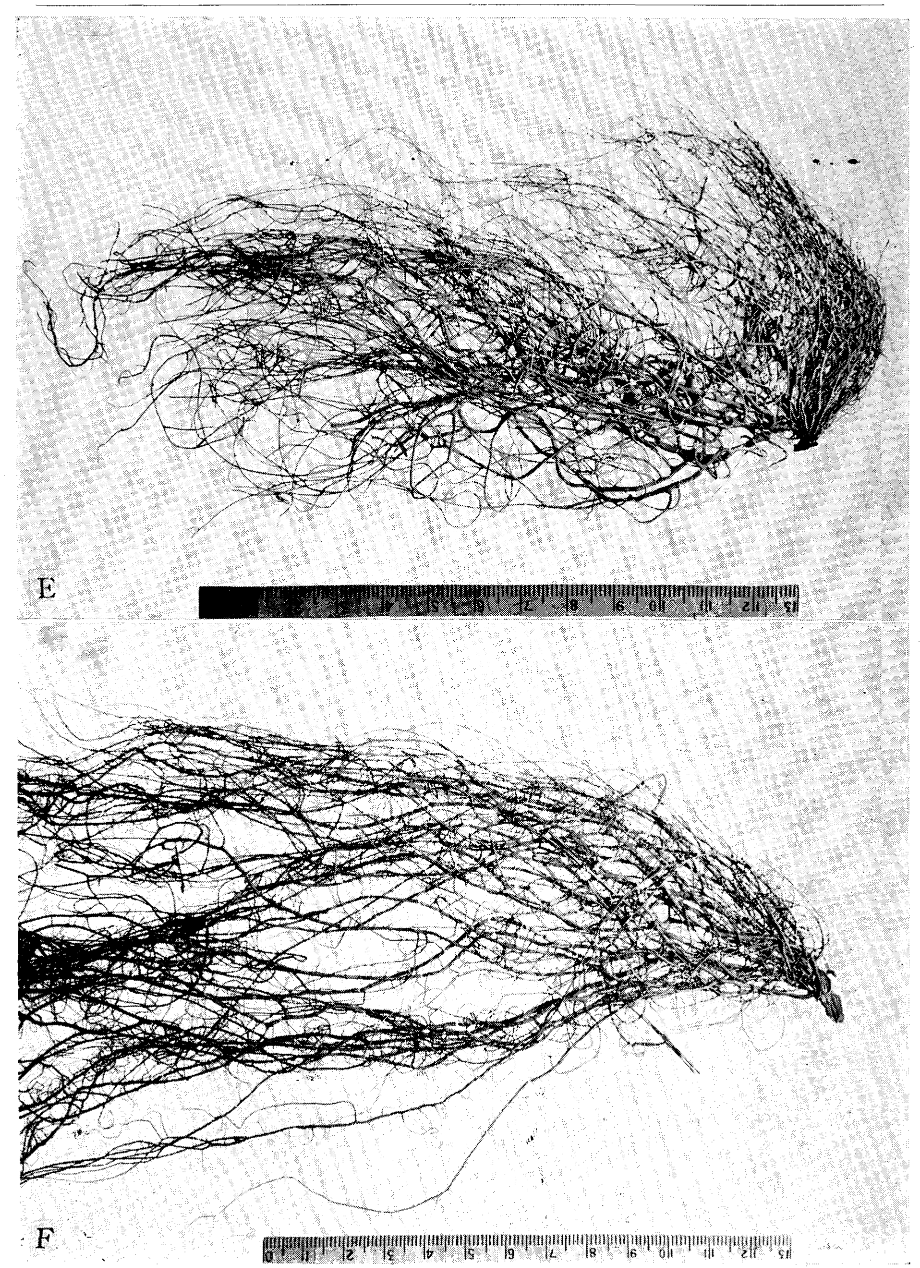
タイ国から輸入される果実のかん詰に，上記の名称のものがある。いままでの漢名の知恵ではかたづかないので，在京のタイ国人にきいたがわからない。それもその筈，タイ国人の間で漢字は日常使われないから当然である。そこで同国へ行く知人に頼んで調べてもらったら，同地在住の華僑が漢字の音を利用したあて字で，前者はランプータン（*Nephelium lappaceum* L.）のことで，後者はアタチエというマンゴスチンの名だと判明した。漢字がかゝれたものはどれも従来の意味での漢名だと思うのはだめだということを教えられた。 （東邦大学薬学部）



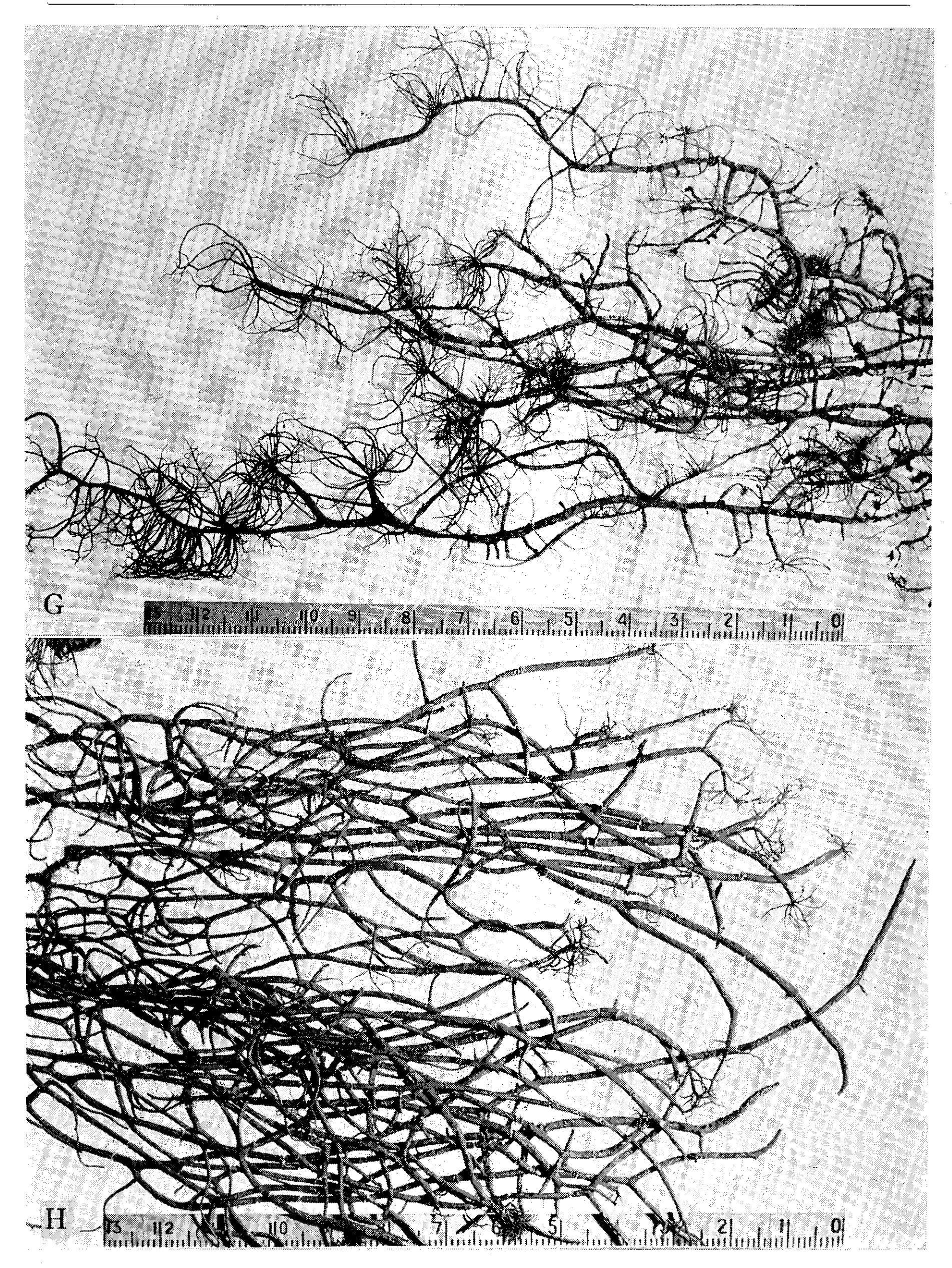
Y. ASAHINA: Lichenologische Notizen (§ 213-214)



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